

**Department of Public Works  
Inventory Management of Consumable  
Parts, Supplies, and Materials Inventory**

**Performance Audit  
October 2013 through September 2017**

**OPA Report No. 18-07  
December 2018**



**Department of Public Works  
Inventory Management of Consumable Parts, Supplies,  
and Materials Inventory**

**Performance Audit  
October 1, 2013 through September 30, 2017**

**OPA Report No. 18-07  
December 2018**

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**EXECUTIVE SUMMARY**  
**Department of Public Works**  
**Inventory Management of Consumable Parts, Supplies, and Materials Inventory**  
**Report No. 18-07, December 2018**

Our audit found that DPW's Supply Warehouse inventory management systems did not produce accurate inventory records to properly account for and safeguard DPW's consumable inventories from fiscal year (FY) 2014 through FY 2017. The Supply Warehouse used three inventory management systems: stock cards, Excel spreadsheets, and the Ron Turley Associates Fleet Management Software (RTA) simultaneously, which did not reconcile with one another. As a result, DPW's consumable inventory records were inaccurate and unreliable, and consequently, exposed inventories to potential misappropriation.

There were numerous discrepancies amongst the inventory records because the Supply Warehouse did not perform periodic reconciliation of the three inventory management systems. In our physical count of 34 sample inventory items, we found discrepancies in 21 items and instances that the Excel spreadsheets and stock cards did not reconcile.

The Excel spreadsheets used to account for the consumable inventories had pervasive, erroneous calculations resulting in \$45 thousand net understatement. Several inventory balances in the Bus Operations Divisions were manually inputted, and balances remain unchanged for the four-year period despite the decrease or increase in the quantities. Some formulae in the Excel spreadsheets were incorrectly applied, which resulted in incorrect year-end inventory amounts.

A physical inventory count was performed in FY 2016 wherein DPW reported no variances. However, our review of FY 2017 Excel spreadsheets showed variances that have already existed in the past inventory records.

Despite the Supply Warehouse's implementation of the RTA for almost two years now, DPW management has not provided a target date to phase out the stock cards and Excel spreadsheets. Because the Supply Warehouse's three inventory management systems do not reconcile with one another, DPW's inventories carry a higher risk of inventory misappropriation.

We made the following recommendations to DPW's management: (1) create written policies, procedures, and guidelines for the RTA; (2) revisit, revise, and enforce written inventory management policies and procedures; and (3) provide staff with necessary training on inventory management.

Benjamin J.F. Cruz  
Public Auditor



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## **Introduction**

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This report presents the results of our performance audit of the Department of Public Works (DPW) Supply Warehouse’s inventory management for fiscal year (FY) 2014 through FY 2017. The objective of our audit was to determine if the Supply Warehouse adequately accounted for and safeguarded DPW’s consumable parts, supplies, and materials inventory (collectively “consumable inventories”).

The scope, methodology, and prior audit coverage are detailed in Appendix 1.

### **Background**

Public Law (P.L.) 1-88 enacted in 1952, established DPW with the responsibility of providing the five major essential services: (1) public safety, (2) transportation, (3) highway maintenance, (4) government-wide support, and (5) capital improvement projects.

DPW is comprised of six divisions that support and provide the following services:

1. Administrative Services (ADM)
2. Capital Improvement Projects (CIP)
3. Highways Maintenance (HM)
4. Building Construction & Facilities Maintenance (BM)
5. Bus Operations (BO)
6. Transportation Maintenance (TM)

See Appendix 2 for DPW’s Organizational Chart.

### **Evolution of DPW’s Inventory Management and Processes**

DPW’s Supply Warehouse is responsible for the stewardship and processes of consumable inventories of the DPW’s Division except for the CIP Division. ADM Division oversees the Supply Warehouse.

Currently, the Supply Warehouse uses three inventory management systems to keep records of inventory dollar value and quantity of items: (1) stock cards, (2) Excel spreadsheets, and (3) the Ron Turley Associates Fleet Management Software (RTA).

The Supply Warehouse’s inventory management system started with the basic stock cards for inventory recordkeeping. They then utilized the antiquated Reflex system that was supported by an aged Microsoft Disk Operating System (MS DOS) to track its inventory. This system crashed in July 2016. Thereafter, the Supply Warehouse utilized the Government of Guam (GovGuam) Purchasing and Inventory System module (Tenda II). Supply Warehouse later determined that

Tenda II was not suited for DPW’s inventory management because of several issues with user access and data entry.

The RTA is the Supply Warehouse’s recent addition to its inventory management system. DPW purchased the RTA with the \$200 thousand (K) grant provided by the Department of Interior (DOI) in July 2016. The TM Division initially utilized the RTA as its software for fleet management. In March 2017, the Supply Warehouse began using the inventory management component of the RTA to account for non-fleet related consumable inventories.

When the Supply Warehouse implemented the RTA, the DPW Controller and the Property Control Officer attended basic and advanced training courses on the RTA features. The RTA will eventually become DPW’s only inventory management system, fleet and non-fleet related. This is after phasing out the stock cards and Excel spreadsheets, and when the Supply Warehouse staff become comfortable with running the system. The DPW Controller acknowledged that full implementation of the RTA as the only inventory management system would take years because of the steep learning curve associated with running a new system.

Purchases of consumable inventories is decentralized, but the Supply Warehouse performs the receipt of goods for all of divisions and issuance of inventories requisitioned. Before purchased items are entered into inventory records, a Supply Warehouse staff verifies the items against the purchase order, GSA master listing and invoices.

The Supply Warehouse stores all the consumable inventories, however, certain inventories are housed in the TM Division’s warehouse because of space limitation.

**\$2.6M in Purchases of Consumable Inventories**

DPW purchased consumable inventories totaling \$2.6 million (M) net of fuel cost from FY 2014 to FY 2017. Annually, DPW purchases averaged \$659 thousand (K). See Table 1.

**Table 1: Consumable Inventories Purchases for FY 2014 through FY 2017**

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>Total</b>	<b>Annual Average</b>
<b>Purchases, net of fuel cost</b>	<b>\$1,084,831</b>	<b>\$630,394</b>	<b>\$511,033</b>	<b>\$408,498</b>	<b>\$2,634,756</b>	<b>\$658,689</b>

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## Results of Audit

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Our audit found that DPW Supply Warehouse's three inventory management systems did not produce accurate inventory records to properly account for and safeguard DPW's consumable inventories. The Supply Warehouse used stock cards, Excel spreadsheets, and the RTA simultaneously to account for DPW's inventories. These inventory systems did not reconcile with one another. As a result, DPW's consumable inventory records were inaccurate and unreliable and consequently, exposed inventories to potential misappropriation.

Specifically, we found that:

- DPW's inventory records were unreliable due to:
  - The Supply Warehouse's three inventory systems resulted in inconsistent inventory records;
  - Physical inventory count performed in FY 2016 was questionable because of the continued existence of errors and discrepancies in FY 2017 inventory records;
  - Erroneous calculations of inventory year-end balances were pervasive throughout the Excel spreadsheet. Discrepancies averaged \$45K annually; and
  - Manually inputted dollar balances on some consumables, most notably in the BO Division, were the same from FY 2014 to 2017 despite changes in inventory quantities.
- Inventory management practices hinder an adequate safeguard of inventories:
  - DPW has not developed written policies and procedures for the RTA since its adoption in March 2017;
  - TM Division staff shared RTA's Super User accounts, the highest access in the RTA, that should have been given to management only; and
  - Consumables stored in the TM Division's warehouse were inadequately safeguarded and monitored.

In our previous report, OPA Report No. 17-04, we identified indicators of fraud and misuse with DPW's heavy equipment and related parts inventory management. There were allegations that heavy equipment and parts were used for personal purposes. In addition, we questioned \$37K in costs that were made for parts issued to heavy equipment that was deteriorated, cannibalized, or idle.

DPW management acknowledged the inventory data recorded in the RTA is still incomplete. Therefore, we did not perform substantial audit procedures on the RTA system.

### **No Reliance on DPW's Inventory Records**

The primary purpose of an inventory management system is to keep accurate records of parts, supplies, and materials. Accurate inventory records are crucial to maintaining financial accounting, order fulfillment, stock replenishment, and the ability to locate items within the warehouse. The Government Accountability Office's (GAO) Best Practices in Achieving Consistent, Accurate Physical Counts of Inventory and Related Property established that inventory record accuracy goals should be set at 95% or higher.

**Multiple Inventory Systems Led to Inaccurate Balances**

The Supply Warehouse uses stock cards, Excel spreadsheets, and the RTA to account for DPW’s consumable inventories. The DPW Controller and the Supply Warehouse staff plan to phase out the use of stock cards and Excel spreadsheets, but an effective date has not been set.

The Supply Warehouse did not perform periodic reconciliation of the three inventory systems resulting in numerous discrepancies in the quantities.

In our physical count of 34 sample inventory items, we found instances where the Excel spreadsheets and stock cards did not reconcile. After adjusting the inventory for transactions that occurred between the dates of our physical count, we found discrepancies in 21 of our 34 samples in the three inventory management systems. See Table 2.

**Table 2: Discrepancies between Inventory Records and OPA Physical Counts**

Item	Description	OPA Physical Count	DPW Spreadsheets	DPW Stock Card	DPW RTA <sup>1</sup>
1 B001-TP42-9200-1020	Brake Pad Front	1	1	0	0
2 B003-3116-9800-1030	Belt Alt	22	22	60	60
3 B006-059L-9800-1030	Brake Shoe Front	6	6	8	6
4 C028-MISC-0000-1060	Connector Male 22-16 Gauge 1/4	0	70	0	N/A
5 C065-ELEC-0000-1040	Connector Thread-less Alum. 1/2	11	11	11	N/A
6 F002-059L-9500-1030	Filter Fuel Secondary	749	727	747	747
7 F002-JPCH-9800-1020	Filter Oil	3	4	3	3
8 F009-059L-8990-1030	Fitting Adapter Hose	60	62	62	62
9 <sup>2</sup> L026-0611-9200-1050	Lining Strap 36"	5	5	5	N/A
10 M003-MISC-0000-1020	Matting Floor Ribbed	20	14	20	N/A
12 O003-MISC-0000-1020	Oil Engine 10W-30	0	0	6	0
13 O004-MISC-0000-1030	Oil 15W-40	0	10	0	N/A
15 O005-MISC-0000-1030	OIL ATF	0	0	0	N/A
14 P117-MISC-0000-1060	Plastic Powder	240	235	235	N/A
15 R017-MISC-0000-1030	De Mark Cleaner Marks	76	76	76	N/A
16 R025-012G-7780-1060	Roll Assy.	2	2	2	N/A
17 S014-MISC-0000-1060	Sign 35 MPH	0	30	0	N/A
18 T003-D611-9200-1060	Transmission Assy.	1	1	1	0.1
19 V009-MISC-0000-1060	Vinyl Reflective Blue 30	0	1	0	N/A
20 V010-MISC-0000-1060	Vinyl White 24	0	8	0	N/A
21 V011-MISC-0000-1060	Vinyl Yellow 24	0	4	0	N/A

<sup>1</sup>N/A indicates inventory item not found in the RTA system as of August 10, 2018.

<sup>2</sup>Item identified with Guam Solid Waste Authority.



In one instance, we counted 749 units of Filter Fuel Secondary (item F002-059L-9500-1030), however, the Excel spreadsheet recorded 727 units and the RTA and stock card recorded 747 units, respectively.

In another instance, we counted 11 units of Connector Thread-less Alum. 1/2 (item C065-ELEC-0000-1040), which matched the stock card and the Excel spreadsheet, but could not be located in the RTA.

Of the 34 samples, 13 items could not be located in the RTA. The DPW Controller mentioned that the Supply Warehouse has not fully implemented the RTA as they have not completely transitioned the inventory records and still have numerous stock cards pending to upload. DPW acknowledged that the RTA's inventory records are not complete.

With the Supply Warehouse staff having to maintain three separate inventory records, the systems are susceptible to errors. In addition, there is duplication of efforts to manually update the stock cards, Excel spreadsheets, and the RTA.

The maintenance of three separate inventory management systems resulted in different recorded quantities for the same items. In addition, by updating the inventory records manually and without regular reconciliation, each is susceptible to incorrect balances. Therefore, we place no reliance on any one system.

#### ***Errors in Spreadsheets Unnoticed Despite a Physical Inventory Count***

The inventory count process is an integral component of an organization's internal control environment. Setting high goals for inventory record accuracy rate is one way of establishing accountability for the physical inventory count. Physical inventory counts must match with the inventory records.

The physical inventory count that the Supply Warehouse conducted in FY 2016 did not result in any variances. None of the consumables needed adjustments, which means that inventory records were correctly calculated. However, the FY 2017 Excel spreadsheets still contained errors we found in the past periods inventory records.

In the FY 2017 Excel spreadsheets, we found similar errors existing in the FY 2014 and FY 2015 inventory records. These errors include manually inputted ending inventory balances and improperly applied formulae.

According to the DPW Controller, the Supply Warehouse was unable to conduct the physical inventory counts for FY 2014 and FY 2015 because of consistent understaffing. In FY 2016, DPW had an additional staff from another division to assist with conducting the physical inventory count. Supply Warehouse attempted to conduct a physical inventory count for FY 2017, however, the implementation of Tenda II, the RTA, and staff shortage delayed the count.

We learned a staff detailed to DPW conducted the FY 2016 physical inventory count, which was reviewed and signed-off by the Inventory Management Officer. DPW's policy states that the Property Control Officer is to conduct the physical inventories.

It appears that the Supply Warehouse lacks the necessary training to conduct and document physical inventory counts and ensure DPW’s consumable inventories are accurately accounted for. Without conducting annual physical counts and reconciling records, an entity can never have an effective inventory management to assure inventory records are accurate and complete.

Given DPW’s annual average purchases of \$659K for consumable inventories, it is important for the Supply Warehouse to keep accurate and reliable inventory records. Accurate accounting of inventory assures that items on hand are safeguarded and deters opportunities for theft or misappropriation. However, due to pervasive errors, discrepancies, and inefficient inventory management practices, the Supply Warehouse was not able to provide accurate information for DPW management’s decision-making pertaining to consumable inventories.

***Erroneous Calculations within Spreadsheets Inventory Records***

We found the Excel spreadsheets used for the current period to account for the consumable inventories were copied from the prior period’s inventory records. All formulae and manually inputted balances for consumables were carried over to the current reporting period. The inventory records are then updated with the current period’s receipts and issuances.

We found that the Excel spreadsheets used to record DPW’s consumable inventories had pervasive, erroneous calculations of balances. Several inventory balances were manually inputted and the formulae to automate calculations were improperly applied, which resulted in incorrect calculations of year-end inventory balances.

Between FY 2014 and FY 2017, the Supply Warehouse’s ending inventory balances averaged \$2.1M annually. We recalculated the ending inventory balances for the same periods and found the Supply Warehouse’s ending inventory balances were lower than our calculations by an average of \$45K due to errors in DPW’s calculation process. See Table 3 below for the differences in reported total ending inventory balances.

**Table 3: Difference of Reported Ending Inventory Dollar Balances (in thousands)**

Divisions	FY 2017			FY 2016			FY 2015			FY 2014		
	DPW	OPA	Diff.	DPW	OPA	Diff.	DPW	OPA	Diff.	DPW	OPA	Diff.
ADM	\$5	\$5	\$0	\$6	\$5	\$0	\$0	\$0	\$0	\$2	\$3	(\$1)
BM	\$87	\$86	\$1	\$77	\$76	\$1	\$89	\$88	\$1	\$91	\$90	\$1
BO	\$973	\$1,009	(\$36)	\$1,029	\$1,065	(\$35)	\$728	\$739	(\$11)	\$656	\$761	(\$105)
HMC	\$928	\$921	\$7	\$831	\$833	(\$1)	\$812	\$822	(\$10)	\$882	\$887	(\$5)
TM	\$282	\$279	\$3	\$301	\$300	\$1	\$246	\$241	\$5	\$226	\$223	\$4
<b>Total</b>	<b>\$2,275</b>	<b>\$2,300</b>	<b>(\$25)</b>	<b>\$2,245</b>	<b>\$2,279</b>	<b>(\$34)</b>	<b>\$1,876</b>	<b>\$1,890</b>	<b>(\$15)</b>	<b>\$1,857</b>	<b>\$1,963</b>	<b>(\$106)</b>

See Appendix 4 for a complete detail of inventory balances recalculation per division.

We also recalculated DPW’s consumable inventory item on a line-by-line basis and identified erroneous calculations. Overall, we found 112 individual errors that were either over or under our recalculation resulting in \$87K collective variance from FY 2014 through FY 2017. For example,

the Supply Warehouse showed a balance for the Brake Shoe Front (B001-059L-9800-1030) as \$2K as of FY 2017. However, our recalculation showed that the balance should have been \$12K.

Out of the 112 inventory items with erroneous calculations, 34 items appeared to have had a repeated pattern on the adjustment of quantities, but not on the dollar amounts. We found this most notably in the BO Division with 21 inventory items. Similarly with the Brake Shoe Front, the ending balance of \$2K did not change during the four years, but the ending quantity changed from 68 as of FY 2014, to 34 as of FY 2015, to 68 as of FY 2016, and to 88 as of FY 2017. These pervasive errors may suggest more serious issues such as asset misappropriation, which was left undetected for years. See Table 4 below for adjustment of quantities, but not dollar amounts.

**Table 4: Sample--Brake Shoe Front**

<b>Fiscal Year</b>	<b>Description</b>	<b>Stock Control No.</b>	<b>Quantities</b>	<b>Unit Price (\$)</b>	<b>Total (\$)</b>
2014	Brake Shoe Front	B001-059L-9800-1030	68	135	1,997
2015	Brake Shoe Front	B001-059L-9800-1030	34	135	1,997
2016	Brake Shoe Front	B001-059L-9800-1030	68	135	1,997
2017	Brake Shoe Front	B001-059L-9800-1030	88	135	1,997

We recommend the DPW Director to provide necessary training on RTA to management and staff. In addition, provide training on inventory management.

### **Inventory Management Practices Expose Inventories to Unnecessary Risks**

The Supply Warehouse’s redundant inventory management systems did not achieve the accuracy required for inventory records. Because of the apparent negligence in correcting the inaccuracies and discrepancies in these records, DPW’s inventories carry a higher risk of misappropriation. These unsound practices in safeguarding consumable inventories could contribute to vulnerabilities.

#### ***No Written Policies & Procedures for RTA***

The implementation of the RTA in March 2017 was intended to mitigate inventory vulnerabilities. However, even with its implementation, the Supply Warehouse has not discontinued the use of the stock cards and Excel spreadsheets. With almost two years since the implementation, the Supply Warehouse is still learning RTA’s basic features.

We observed staff of Supply Warehouse and the DPW Controller had a different understanding on which consumable inventories are to be recorded within the RTA. The Supply Warehouse staff did not have any guidance on how to address certain situations, such as recording for the same item with different purchase prices. DPW has not developed written policies and procedures to effectively guide staff on using the RTA.

#### ***Sharing of TM Division’s RTA Super User Account***

The TM Division uses the RTA to electronically process inventory requests from the Supply Warehouse. TM staff has RTA login account to process these requisitions. There are three levels

of accounts with each restricted to certain features or access points. The Level III, or Super User account, gives the highest-level access and authority in the RTA.

We found that the TM Division’s Data Entry Clerk and Automotive Mechanic Supervisor were sharing a Super User account. With the staff sharing of the RTA access accounts, the inventory records are not safeguarded from unauthorized entries and there is no accountability for DPW’s overall inventory management.

After we brought this issue to the management’s attention, the RTA Acting Administrator addressed the concern. There are now separate access with appropriate levels of authority for the staff who need access into the RTA. The sharing was allowed by management because they thought they needed to pay for additional user accounts.

We recommend the DPW Controller create written policies, procedures, and guidelines on RTA processes and how the system would be managed by the Supply Warehouse. We also recommend that the DPW Controller revisit, revise, and enforce DPW Supply Manual, which includes the conduct of annual physical inventory counts and inventory physical controls.

### **Other Matter**

During our TM Division site visit, we noted unsecured physical access to drums of oil, cleaning materials, and school bus tires, which were stored in an open space at the TM Division’s warehouse. DPW’s Supply Warehouse has limited space to store bulky items.

We observed that the only security measure was the warehouse’s overhead doors, which if left open and unguarded, provides an opportunity for theft. According to TM Division, surveillance equipment are in place to mitigate the risk of theft. See the following images at the time of our visit.



**Image 1:** TM Division’s warehouse, outside of where the bulky inventories are stored.



**Image 2:** Bus tires stored in the TM Division’s warehouse.



**Image 3:** Drums of oil and cleaning products stored in the TM Division’s warehouse.

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## Conclusion and Recommendations

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Our audit of the DPW Supply Warehouse's inventory management for FY 2014 through FY 2017 found that inventory records were not accurate to properly account for and safeguard DPW's consumable inventories. The Supply Warehouse used three inventory management systems: stock cards, Excel spreadsheets, and the RTA simultaneously, which did not reconcile with one another. Although having a duplicated manual inventory management systems may provide checks and balances of the records, these are subject to human errors, especially when not regularly reconciled.

We placed no reliance on DPW's inventory records due to pervasive errors found in the Excel spreadsheets. These errors were not discovered by the Supply Warehouse even though its FY 2016 physical inventory count resulted in no variance.

Despite implementing the RTA in March 2017, Supply Warehouse continue to use the stock cards and Excel spreadsheets to account for DPW's consumable inventories. Written policies and procedures have also not been created to properly guide Supply Warehouse staff on using the RTA. A date to phase out the stock cards and Excel spreadsheets has not been set by DPW.

With the DPW's annual purchases of consumable inventories averaging \$659K, the Supply Warehouse should exercise good stewardship by keeping accurate inventory records to mitigate opportunities for fraud and theft. For operational efficiency and mitigation of inventories from vulnerabilities, DPW should only maintain the RTA as its sole automated inventory management system.

In order for DPW to maintain an effective and reliable inventory management system and adequately safeguard its inventories, we recommend the following:

*DPW Controller*

1. Create written policies, procedures, and guidelines on RTA processes and how the system would be managed by the Supply Warehouse.
2. Revisit, revise, and enforce DPW Supply Manual, which includes the conduct of annual physical inventory counts and inventory physical controls.

*DPW Director*

3. Provide necessary training on RTA to management and staff. In addition, provide training on inventory management.

## Classification of Monetary Amounts

	Finding Description	Questioned Costs	Potential Savings	Unrealized Revenue	Other Financial Impact
<b>1</b>	<b>No Reliance on DPW's Inventory Records</b>				
	Multiple Inventory Systems Led to Inaccurate Balances	\$ -	\$ -	\$ -	\$ -
	Errors in Excel Spreadsheets Unnoticed Despite a Physical Inventory Count	\$ -	\$ -	\$ -	\$ -
	Erroneous Calculations within Excel Spreadsheet Inventory Records	\$ -	\$ -	\$ -	\$44,644
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$44,644</b>
<b>2</b>	<b>Inventory Management Practices Exposes Inventories to Unnecessary Risks</b>				
	No Written Policies & Procedures for RTA	\$ -	\$ -	\$ -	\$ -
	Sharing of TM Division's RTA Super User Account	\$ -	\$ -	\$ -	\$ -
	Physical Monitoring for Items out of Supply Warehouse's Storage	\$ -	\$ -	\$ -	\$ -
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
	<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$44,644</b>

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## Management Response and OPA Reply

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A draft report was transmitted to DPW in December 2018 for their official response. We met with DPW officials in December 2018 to discuss our findings and recommendations.

DPW provided their official response on December 17, 2018, where they generally concurred on our findings. However they disagreed on the following:

*1. Errors in [Excel] Spreadsheets Unnoticed Despite a Physical Inventory Count*

**DPW Response:** DPW agreed that the Excel spreadsheets contained errors but is only 2%, which is below the 5% tolerable rate. DPW disagreed with the draft report stating that no physical inventory count was conducted for FY 2017. DPW stated that prior to FY 2016 and FY 2017, no physical counts have been conducted due to severe shortage of personnel. As a corrective action plan, DPW will conduct semi-annual physical count beginning March 2019.

**OPA Reply:** During our fieldwork, we were informed that the FY 2017 inventory count was delayed. This was not performed at the time when it was supposed to be completed. We updated the draft report to only reflect that review was done for the FY 2016 inventory count results, and noted that FY 2017 still contained the errors found in prior periods.

*2. Physical Monitoring for Items out of Supply Warehouse's Storage*

**DPW Response:** DPW responded that it has closed-circuit-television security (CCTV) cameras all over the premises and DPW has security guards on duty 24/7.

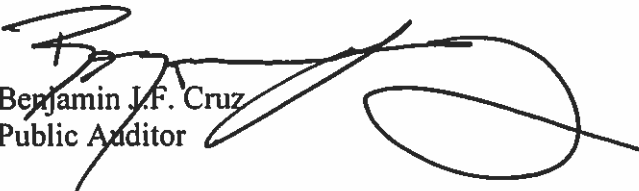
**OPA Reply:** The draft report already stated that surveillance equipment are in place as represented by the TM Division. We reclassified this finding as other matter on the report.

DPW agreed with all the recommendations. The DPW Director will work with the Bureau of Budget and Management Research and DOA. They will apply for federal grants to enhance the RTA system and to provide training at the various levels of discipline. See Appendix 5 for DPW's management response.

The legislation creating the Office of Public Accountability requires agencies to prepare a corrective action plan to implement audit recommendations, to document the progress of implementing the recommendation, and to endeavor to complete implementation of the recommendations no later than the beginning of the next fiscal year. We will be contacting DPW to provide the target date and title of the official(s) responsible for implementing the recommendations.

We appreciate the cooperation and assistance from the staff and management of DPW Supply Warehouse and TM Divisions during our audit.

OFFICE OF PUBLIC ACCOUNTABILITY

  
Benjamin J.F. Cruz  
Public Auditor



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## **Appendix 1: Objective, Scope, and Methodology**

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The objective of our audit was to determine if DPW Supply Warehouse adequately accounted for and safeguarded DPW's consumable inventories. The scope of our audit was from FY 2014 through FY 2017, or October 1, 2013 through September 30, 2017. Our review of DPW's consumable inventory records were on the following divisions: (1) ADM, (2) TM, (3) BO, (4) BM, and (5) HMC.

To answer our objective, we performed the following:

- Reviewed Supply Warehouse inventory policies and procedures. Researched pertinent laws, best practices, and other relevant documents on inventory management.
- Conducted interviews and walkthrough with key DPW officials and staff involved with inventory processes and those who have access to the RTA.
- Obtained DPW's inventory records and purchase expenditures report and performed an analysis.
- Recalculated DPW's Excel spreadsheet inventory records.
- Observed inventory receipt of goods and recording of items into Supply Warehouse's stock cards and Excel spreadsheets and RTA inventory management systems.
- Conducted inventory counts as of July 2018 for 34 items on August 8, 2018 with the assistance of Supply Warehouse Storekeeper.
- Reviewed results of FY 2016 physical inventory count.
- Observed physical storage of off-site items from Supply Warehouse.

We conducted this audit in accordance with the standards for performance audits contained in Government Auditing Standards, issued by the Comptroller General of the United States of America. These standards require that we plan our audit objectives and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# Appendix 2: DPW Functional Chart

## Department of Public Works Organizational Chart FY 2015

**FOOTNOTES:**

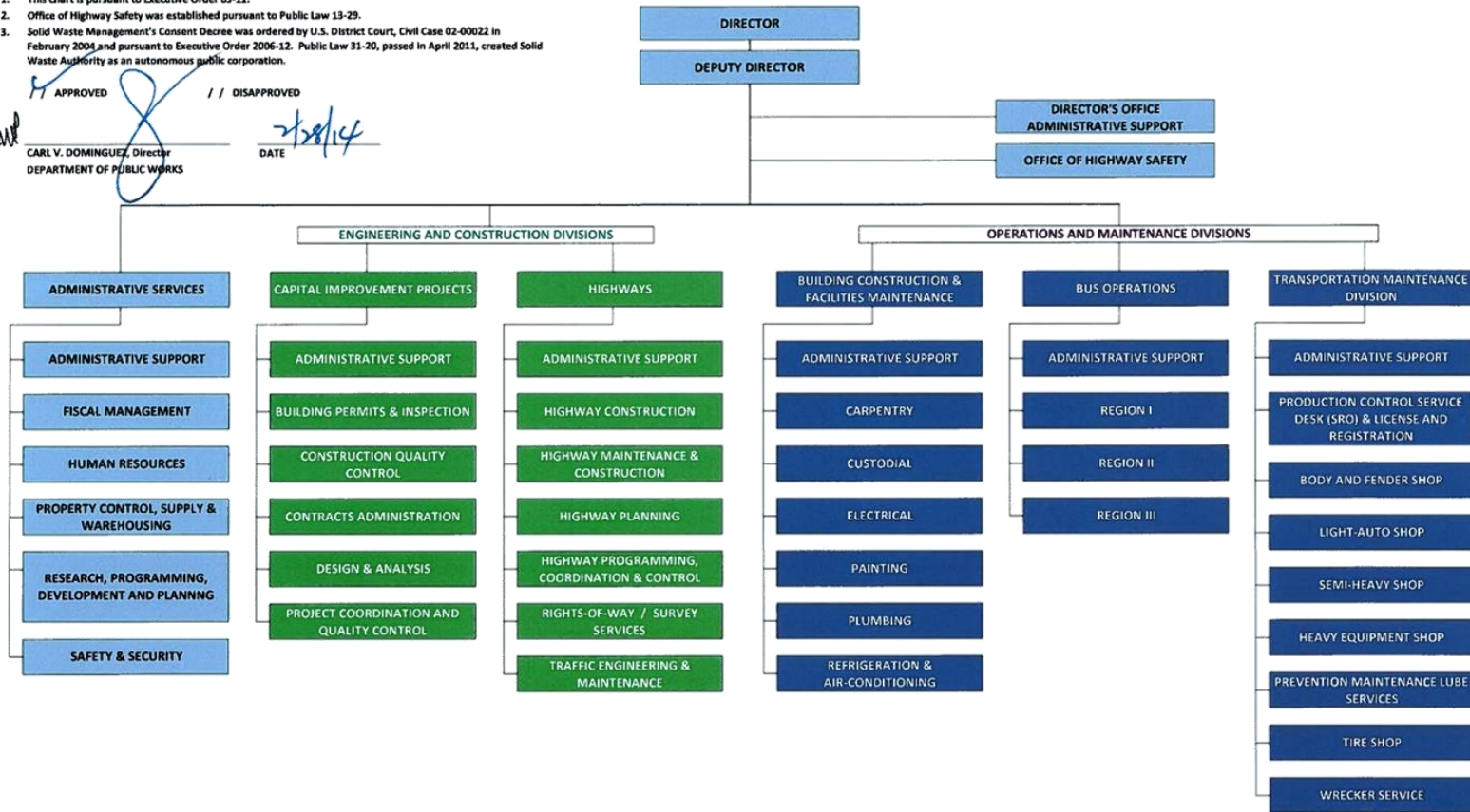
1. This chart is pursuant to Executive Order 83-11.
2. Office of Highway Safety was established pursuant to Public Law 13-29.
3. Solid Waste Management's Consent Decree was ordered by U.S. District Court, Civil Case 02-00022 in February 2004 and pursuant to Executive Order 2006-12. Public Law 31-20, passed in April 2011, created Solid Waste Authority as an autonomous public corporation.

APPROVED // DISAPPROVED

*[Signature]* / *[Signature]*

DATE: 2/28/14

CARL V. DOMINGUEZ, Director  
DEPARTMENT OF PUBLIC WORKS



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## Appendix 3: Prior Audit Reports

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### Performance Audits

➤ **OPA Report No. 17-04, Department of Public Works Heavy Equipment and Related Parts Inventory Management, September 2017**

It was noted that DPW management failed to prioritize or institute internal controls, such as conducting annual physical inventories, reconciling purchase reports, and ensuring proper authorization for repair orders and parts, to ensure that DPW heavy equipment and related parts are appropriately used for official government purposes.

The following findings are as follows:

- Possible ethical violations derived from the fact that a DPW employee provided free heavy equipment rental from his company.
- No controls over heavy equipment was observed during physical inspections.
- Unusual repair orders and issued parts for deteriorated, cannibalized, and idle heavy equipment.

➤ **OPA Report No. 07-12, Government of Guam Vehicle Fleet Inventory, October 2007**

It was noted that to address weaknesses in internal control, equipment data should be complete, compatible, and consistent; policies and procedures should be consistently implemented and applied; inventory records should be reviewed and updated on a timely basis; and physical security should adequately safeguard assets.

The following findings are as follows:

- No reconciliations of government vehicle inventory records maintained independently by DPW, Department of Administration (DOA), Department of Revenue and Taxation (DRT), and line or autonomous agencies.
- No surveys of old vehicles listed on DPW's inventory records.
- No submissions to DPW of "survey documents" and contract terminations for leased vehicles.
- No communications to DPW of vehicle registration, transfer, or survey by autonomous agencies.
- No designated common area to house surveyed vehicles of General Services Agency.

### Financial Audits:

➤ **Government of Guam Single Audit Reports (SAR), FY 2014 to FY 2016**

- **SAR Finding No. 2016-009, Equipment and Real Property Management.**
  1. The required comprehensive inventory was performed in January 2016, but not reconciled.
  2. Reported capital assets were not reconciled to inventory records as of September 30, 2016.
- **SAR Finding No. 2015-007, Equipment and Real Property Management.**
  1. The required comprehensive physical inventories of properties was not performed in FY 2015 or in the two prior years. However, subsequently in January 2016, the inventory was completed.
  2. Survey reports for \$668K worth of assets were not available.
- **SAR Finding No. 2014-001, Equipment and Real Property Management.**
  1. The required comprehensive physical inventories of properties was not performed in FY 2014 or in the two prior years.

## Appendix 4: DPW Ending Inventory Balances vs. OPA Recalculation

	<u>FY 2017</u>			<u>FY 2016</u>			<u>FY 2015</u>			<u>FY 2014</u>			
	Supply Warehouse	OPA	Diff.	Supply Warehouse	OPA	Diff.	Supply Warehouse	OPA	Diff.	Supply Warehouse	OPA	Diff.	
<b>ADM</b>	Inventory I	\$4,977	\$4,900	\$77	\$5,752	\$5,478	\$274	\$0	\$0	\$0	\$1,572	\$2,665	(\$1,093)
	Inventory II	0	0	0	0	0	0	0	0	0	0	0	0
	Inventory III	0	0	0	0	0	0	0	0	0	0	0	0
	<b>Subtotal</b>	<b>\$4,977</b>	<b>\$4,900</b>	<b>\$77</b>	<b>\$5,752</b>	<b>\$5,478</b>	<b>\$274</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,572</b>	<b>\$2,665</b>	<b>(\$1,093)</b>
<b>BM</b>	Inventory I	\$15,421	\$15,360	\$61	\$15,800	\$15,800	\$0	\$15,921	\$15,921	\$0	\$17,420	\$17,420	\$0
	Inventory II	47,706	47,080	626	46,787	46,161	626	48,117	47,490	626	49,816	49,185	631
	Inventory III	24,152	23,208	944	14,880	13,932	948	25,152	24,204	948	23,578	23,578	0
	<b>Subtotal</b>	<b>\$87,279</b>	<b>\$85,647</b>	<b>\$1,632</b>	<b>\$77,467</b>	<b>\$75,893</b>	<b>\$1,574</b>	<b>\$89,189</b>	<b>\$87,616</b>	<b>\$1,574</b>	<b>\$90,814</b>	<b>\$90,183</b>	<b>\$631</b>
<b>BO</b>	Inventory I	\$99,694	\$100,157	(\$464)	\$105,778	\$107,223	(\$1,444)	\$68,319	\$68,780	(\$461)	\$77,422	\$77,491	(\$69)
	Inventory II	457,899	496,871	(38,972)	468,021	504,351	(36,330)	346,021	359,436	(13,415)	328,278	345,898	(17,620)
	Inventory III	415,063	411,491	3,573	455,343	452,934	2,410	313,523	310,422	3,101	250,438	337,380	(86,942)
	<b>Subtotal</b>	<b>\$972,656</b>	<b>\$1,008,519</b>	<b>(\$35,863)</b>	<b>\$1,029,143</b>	<b>\$1,064,508</b>	<b>(\$35,365)</b>	<b>\$727,863</b>	<b>\$738,638</b>	<b>(\$10,775)</b>	<b>\$656,138</b>	<b>\$760,769</b>	<b>(\$104,631)</b>
<b>HMC</b>	Inventory I	\$129,075	\$129,075	\$0	\$138,025	\$138,406	(\$381)	\$130,396	\$130,396	\$0	\$112,487	\$112,487	\$0
	Inventory II	407,323	406,622	700	403,610	403,568	42	407,682	407,639	42	415,495	415,453	42
	Inventory III	391,860	385,717	6,143	289,782	290,529	(747)	274,237	284,212	(9,975)	354,179	358,967	(4,788)
	<b>Subtotal</b>	<b>\$928,258</b>	<b>\$921,414</b>	<b>\$6,844</b>	<b>\$831,417</b>	<b>\$832,503</b>	<b>(\$1,085)</b>	<b>\$812,314</b>	<b>\$822,247</b>	<b>(\$9,933)</b>	<b>\$882,161</b>	<b>\$886,907</b>	<b>(\$4,746)</b>
<b>TM</b>	Inventory I	\$56,284	\$55,777	\$507	\$57,235	\$56,820	\$415	\$56,432	\$56,080	\$351	\$59,311	\$59,035	\$277
	Inventory II	100,560	100,406	154	108,147	108,119	29	95,743	95,715	29	99,782	99,754	29
	Inventory III	125,266	123,066	2,200	135,636	135,304	332	94,254	89,692	4,562	67,161	63,736	3,425
	<b>Subtotal</b>	<b>\$282,110</b>	<b>\$279,249</b>	<b>\$2,861</b>	<b>\$301,018</b>	<b>\$300,242</b>	<b>\$775</b>	<b>\$246,429</b>	<b>\$241,487</b>	<b>\$4,942</b>	<b>\$226,254</b>	<b>\$222,524</b>	<b>\$3,730</b>
<b>Total</b>	<b><u>\$2,275,280</u></b>	<b><u>\$2,299,730</u></b>	<b><u>(\$24,450)</u></b>	<b><u>\$2,244,797</u></b>	<b><u>\$2,278,624</u></b>	<b><u>(\$33,827)</u></b>	<b><u>\$1,875,796</u></b>	<b><u>\$1,889,988</u></b>	<b><u>(\$14,192)</u></b>	<b><u>\$1,856,939</u></b>	<b><u>\$1,963,047</u></b>	<b><u>(\$106,108)</u></b>	
<b>Annual Average</b>	<b><u>\$44,644</u></b>												



*The Honorable*  
**EDDIE BAZA CALVO**  
Governor

*The Honorable*  
**RAY TENORIO**  
Lieutenant Governor



**GLENN LEON GUERRERO**  
*Director*  
**ANDREW S. LEON GUERRERO**  
*Deputy Director*

December 17, 2018

The Honorable Benjamin J.F. Cruz  
Public Auditor  
Office of Public Accountability  
Suite 401 DNA Building  
238 Archbishop Flores Street  
Hagatna, Guam 96940

Subject: Draft Audit Report – Department of Public Works Inventory Management of Consumable Parts, Supplies, and Materials Inventories

Dear Mr. Cruz:

Transmitted herewith, please find the Department's response and supporting attachments to the draft performance audit report (received on December 13, 2018) of the Department of Public Works (DPW) Inventory Management of Consumable Parts, Supplies, and Materials Inventories for the period October 2013 through September 2017.

**FINDING: Multiple Inventory Systems Led to Inaccurate Balances:**

DPW Supply Warehouse is simultaneously manual using stock cards, excel spreadsheets and the Ron Turley Association (RTA) Fleet Management System to account for DPW's consumable inventories. The DPW Controller and the Supply Warehouse plan to phase out the stock cards and spreadsheets, but the effectivity date has not been set.

**Agree or disagree:**

DPW agrees with this finding. At the time the OPA team conducted their audit, the Supply Warehouse Section of DPW's Administrative Services Division and the Transportation Maintenance Division just implemented a new fleet management system. The fleet management system acquired is the RTA Fleet Management Software System. DPW was just learning this new system and was in the midst of implementation, data conversion and performing a live run. Due to the history of our antiquated system that crashed several years ago, DPW had no choice but to rely on back up systems. As a result, all three systems were used parallel as a contingency plan in the event recovery procedures had to be activated.

Draft Audit Report  
Page 2 of 3

Corrective Action Plan:

DPW will use the RTA System as our main inventory system and will abort the manual stock records and excel spreadsheets. The target date is between March 2019 but no later than September 30, 2019. The reason for the date extension is due to the transition of the incoming new administration as well as other deadlines related to the new budget cycle. The Controller and Inventory Management Officer (IMO) will both be responsible for this task assignments.

**FINDING: Errors in Spreadsheets Unnoticed Despite a Physical Inventory Count and with Spreadsheets Inventory Records:**

The only physical inventory count conducted by DPW was in FY 2016. No variance were found but errors in inventory spreadsheet existed in FY 2014 and FY 2015 records. We learned that a detailed staff, not the Property Control Officer conducted the FY 2016 physical count which was reviewed and signed off by the Inventory Management Officer. DPW's policy states that the Property Control Officer is to conduct the physical inventory count.

Agree or disagree:

DPW disagrees with the findings. DPW conducted physical inventory counts for FY 2016 and FY 2017. Prior to this period, DPW did not perform annual physical inventory count due to the severe shortage of personnel. While all staff in the warehouse had to perform physical inventory count, the Inventory Management Officer is the ultimate responsible personnel and not the Property Control Officer. DPW agrees that the spreadsheets contained errors due to formulas not changed. However, the error rate resulted by DPW is only 2% which is below the 5% tolerable error rate.

Corrective Action Plan

DPW will conduct semi-annual physical inventory count effective in FY 2019. Inventory dates will be set on March 2019 and September 2019. DPW intends to use the RTA automated fleet and inventory system as our main and only system. As a result, there will no longer be calculation errors.

The Inventory Management Officer will be responsible for the physical inventory count which will be done by March and September 2019. The Controller will conduct training to all warehouse staff by February 2019.

**FINDING: No written Policies & Procedures for RTA**

Agree or disagree:

DPW agrees to this finding. DPW intends on developing writing policies and procedures and update manuals related to the RTA system no later than September 30, 2019. The Controller will provide written policies, procedures and guidelines by September 30, 2019.

Draft Audit Report  
Page 3 of 3

**FINDING: Sharing of TM Division's RTA Super User Account**

Agree or disagree:

In regards to Item 3b of the OPA Inventory Management Conference meeting on Friday, December 14, 2018, specifically sharing of a TMD Administrator's account, the concern was addressed and corrected on October of 2018. TMD administrators met with the auditors at that time to demonstrate that the problem has been corrected. The auditors were satisfied that we have corrected the concern.

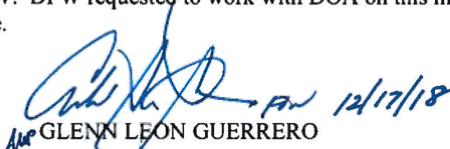
**FINDING: Physical Monitoring for Items out of TM and Supply Warehouse's Storage**

Agree or disagree

DPW disagrees with this finding. DPW compound has closed circuit television security CCTV cameras all over the premises. In addition, there are cameras inside to TM warehouse and outside of the building. In addition, we have security guards on duty 24/7. The items stored in TM's inventory are drums and bus tires which are too large to conceal out of the compound.

**OPA Recommendation: Training**

DPW agrees with this recommendation and all other recommendations. The Director will work with BBMR and DOA and apply for federal grants to enhance the RTA System and to provide training at the various levels of discipline (TM's Automotive Mechanics and inventory warehouse and supply staff) on the RTA System. Furthermore, DPW intends to apply for federal grants for technical assistance for inventory bar code scanner and tags for DPW's inventory and fixed assets. As in the past, DPW submitted a grant to USDOJ OIG for a Fixed Asset System, however the award was given to DOA instead of DPW. DPW requested to work with DOA on this matter but there has been no progress as of this date.

  
Mr. GLENN LEON GUERRERO 12/17/18

Attachments

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## Appendix 6: Status of Audit Recommendations

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No.	Addressee	Audit Recommendations	Status	Action Required
1	DPW Controller	Create written policies, procedures, and guidelines on RTA processes and how the system would be managed by the Supply Warehouse.	Open	Please provide target date and title of officials(s) responsible for implementing the recommendation
2	DPW Controller	Revisit, revise, and enforce DPW Supply Manual, which includes the conduct of annual physical inventory counts and inventory physical controls.		
3	DPW Director	Provide necessary training on RTA to management and staff. In addition, provide training on inventory management.		





**Department of Public Works  
Inventory Management of Consumable Parts, Supplies,  
and Materials Inventory  
Report No. 18-07, December 2018**

## **ACKNOWLEDGEMENTS**

**Key contributions to this report were made by:**

Anna Manibusan, Audit Staff  
Christian Rivera, Auditor-in-Charge  
Edlyn Dalisay, CPA, Audit Supervisor  
Rodalyn Gerardo, CIA, CGFM, CPA, CGAP, CGMA, CICA, Audit Supervisor  
Benjamin J.F. Cruz, Public Auditor

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